

1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

Solution:

The top three variables that most significantly influence the probability of a lead conversion are:

- a) Total Time Spent on Website
- b) Lead Add Form (from Lead Origin)
- c) Had a Phone Conversation (from Last Notable Activity)

2. What are the top 3 categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion?

Solution:

The top three categorical/dummy variables to prioritize in order to increase the probability of lead conversion are:

- a) Lead Add Form (from Lead Origin)
- b) Had a Phone Conversation (from Last Notable Activity)
- c) Working Professional (from What is your current occupation)

3. X Education has a period of 2 months every year during which they hire some interns. The sales team, in particular, has around 10 interns allotted to them. So during this phase, they wish to make the lead conversion more aggressive. So they want almost all of the potential leads (i.e. the customers who have been predicted as 1 by the model) to be converted and hence, want to make phone calls to as much of such people as possible. Suggest a good strategy they should employ at this stage.

Solution:

The final prediction is determined using an optimal cut-off value of 0.37. To adopt a more aggressive sales approach, the company might choose to contact all leads with a conversion probability (value = 1) below a cut-off of 0.3 (highlighted in yellow in the 0.3 column).

4. Similarly, at times, the company reaches its target for a quarter before the deadline. During this time, the company wants the sales team to focus on some new work as well. So during this time, the company's aim is to not make phone calls unless it's extremely necessary, i.e. they want to minimize the rate of useless phone calls. Suggest a strategy they should employ at this stage.

Solution:

To reduce the number of unproductive phone calls, the company may opt to contact only those leads with a conversion probability (value = 1, highlighted in yellow) under the 0.7 cut-off column. However, this approach may result in missing leads that were actually converted but incorrectly predicted as not converted by the model (highlighted in red). Despite this, it shouldn't be a significant concern since the target has already been achieved.